DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

August 11, 2016

Ms. Sonya Sasseville
Office of Land and Emergency Management
U.S. Environmental Protection Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Mail Code: 5303P
Washington, DC 20460

Ms. Anna Krueger
Economist
U.S. Environmental Protection Agency Headquarters
William Jefferson Clinton Building
Mail Code 5303P
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Submitted via Email to: Krueger.Anna@epa.gov, Sasseville.Sonya@epa.gov, Barr.Linda@epa.gov, Barbery.Andrea@epa.gov, Hanson.Andrew@epa.gov

Dear Ms. Sasseville and Ms. Krueger:

Section 108(b) of CERCLA directs EPA to develop requirements that classes of facilities establish and maintain evidence of financial responsibility consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances. On January 29, 2016, the United States Court of Appeals for the District of Columbia Circuit in *In Re: Idaho Conservation League, Et Al., Petitioners, On Petition for Writ of Mandamus to the United States Environmental Protection Agency,* No. 14-1149, issued an order establishing a schedule for EPA to follow in establishing rules for the hard rock mining industry. The order requires EPA to sign a notice of proposed rulemaking by December 1, 2016 and to take final action by December 1, 2017.

EPA has invited states to submit "pre-publication" comments on the federalism implications of EPA's proposed rule on financial assurance requirements under section 108(b) of CERCLA for the hard rock mining sector by August 17, 2016. In response, the South Dakota Department of Environment and Natural Resources offers the enclosed overview of our state's financial assurance requirements and our "pre-publication" comments on the proposed rules.

We are concerned the proposed rules will have the potential to cause significant impacts to our postclosure and cyanide spill bonds, with concomitant impacts to the efficacy of our regulatory program. We are also asking for clarification of the types of mines in our state which will be required to comply with the new rules and whether EPA plans to actively coordinate with states as bonds are calculated and established. In addition, we outline measures instituted in South Dakota to reduce the risk of hazardous substance releases and request the rules provide for an exemption for states that have instituted defined risk reduction measures. Finally, we are asking EPA to participate in more substantive consultation with the states prior to publishing a proposed rule.

Thank you again for the opportunity to provide comments on the proposed rules. We appreciate your serious consideration of our comments and recommendations. We are also coordinating with the Interstate Mining Compact Commission and other state organizations on pre-publication rule comments and anticipate endorsing those comments. If you have any questions, please contact Eric Holm at (605) 773-4201.

Sincerely,

Steven M. Pirner
Secretary

Enclosure

cc: Linda Barr, EPA
Andrea Barbery, EPA
Andrew Hanson, EPA
Greg Conrad, IMCC
Chris Scolari, WGA
Shaun McGrath, EPA
Matt Konenkamp, Governor Daugaard's Office
Steve Blair, Assistant Attorney General

South Dakota Department of Environment and Natural Resources
CERCLA 108(b) Pre-Publication Financial Assurance Rule Comments

South Dakota's Financial Assurance Requirements for Hardrock Mining

The South Dakota Department of Environment and Natural Resources (Department) and the Board of Minerals and Environment (Board), under South Dakota Codified Law (SDCL) 45-6B, regulate mining operations in the state and require financial assurance. A Large Scale Mine Permit (SDCL 45-6B) is required for mines that affect more than 10 acres and mine more than 25,000 tons annually or use chemical or biological leaching agents. These mines are complex and difficult to reclaim, and may have long term-water treatment or other costs associated with them.

There are potentially three different types of bonds required for large scale mining operations in South Dakota. They include a reclamation bond, additional financial assurance for mining operations that employ chemical or biological leaching ("spill bond"), and post-closure financial assurance. By statute, the reclamation bond is required to cover the actual cost of reclamation, which would accrue to the state if a third party contractor had to be hired to reclaim the site. There is no set limit on the bond amount, and it must be submitted prior to the issuance of the mine permit.

The Department has copyrighted a spreadsheet program, called "BondCalc," that was developed in the 1980's to calculate mine permit bonds. The program has been refined and improved over the years. We also use Nevada's SRCE bond estimation program. These programs are used to do an engineering cost estimate based on having a third party contractor do the reclamation work. The cost estimate includes conservative equipment section based on local rates and equipment availability, actual operating costs and information from other states, and mine site acreages and volumes. Several references are used to identify costs, including the "Caterpillar Performance Handbook" and "Means Cost Data Book" among others. Certain assumptions are made in the calculation, such as a five-year reclamation timeframe. Overhead and indirect costs are also considered, and credit is given for reclamation work already completed.

Large scale mine permit cost calculations include:

- Earthmoving costs, such as reducing waste rock facility slopes, backfilling pits, grading, and topsoil replacement;
- Revegetation, including seeding, mulching, and fertilizing
- Erosion control;
- Disposal of pond solutions and neutralizing heap leach pads;
- In-situ ground water restoration;
- Site maintenance during the closure period;

- Monitoring and sampling;
- Water treatment;
- Waste depository caps;
- Well plugging;
- Building demolition; and
- Indirect costs, such as mobilization, performance bond, contractor overhead, contractor profit, state excise tax, inspection and administration, engineering and consulting, scope and bid, and contingencies.

In addition to the reclamation bond, financial assurance, referred to as a "Spill Bond", is required for mining operations that employ chemical or biological leaching. The Spill Bond covers the cost of responding to and remediating accidental releases of chemical or biological leaching agents. The maximum amount that may be required for a Spill Bond is $1 million. Spill Bond calculations are based on a site-specific engineering cost estimate which assumes a hypothetical spill or leak event, and a third party contractor doing the remediation work.

Mine operators are also required to submit postclosure financial assurance as part of a postclosure plan. Generally, a 30-year postclosure period applies, but the length of the postclosure period can be lengthened or shortened by the state, depending on site conditions. Postclosure bonds are required at the time of reclamation bond release and prior to the start of the post-closure period. These bonds are also calculated based on an engineering cost estimate for a third party contractor to do the work. The calculation includes costs for monitoring and sampling, inspection and maintenance activities, long term water treatment, such as for acid rock drainage (ARD), cap maintenance, and overhead and indirect costs. Considering a postclosure bond may be necessary for 30 or more years, a present worth analysis is used to calculate the long term bond. A lump sum amount is determined that, if deposited today, will cover costs over the post-closure period.

South Dakota mining statutes and permit conditions allow the state to periodically adjust bond amounts as site conditions change, permits are amended, technical revisions are made, or for other reasons requiring an adjustment. Bond amounts are also adjusted for inflation based on the construction cost index. Bonds are reviewed and adjusted on an annual basis.

The Department calculates the proposed bond amount after operators submit cost estimates for mine reclamation and post closure care in a mine permit application. The Department also recommends the amount and type of bonding mechanism to the Board which sets the final amount and type of bond. The bond must be submitted before a permit is issued. Bonds may be in the form of cash (certificates of deposit), irrevocable letter of credit, corporate surety, or government securities. Company net worth guarantees are not accepted by the Board.

South Dakota's Comments on Proposed CERCLA 108(b) Rules

1. **Exempt Classes of Hard Rock Mining**: During the September 2015 and May 2016 webinar presentations, EPA identified certain classes of hard rock mining facilities that are not included in the rulemaking by referring to a June 29, 2009 memorandum entitled

"Mining Classes not Included in Identified Hard Rock Mining Classes of Facilities". EPA also indicated placer mines that do not use hazardous substances, exploration mines, and small mines less than five acres that present a lower level of risk would not be included in the rulemaking. The Department requests EPA clearly identify in the rules those classes of mines that are exempt from the CERCLA 108(b) financial responsibility requirements, including those mentioned above.

2. **Postclosure Bonds**: Given contaminants requiring long term water treatment are considered hazardous substances under CERCLA, the Department is concerned its postclosure bonds as described above would be duplicated and pre-empted by the new financial responsibility rules.

   During the September 2015 and May 2016 webinars, EPA did not specifically mention the impact the new rules will have on states that require postclosure plans and bonds, such as South Dakota. During the July 19 conference call between EPA and the states, as part of the agency's federalism outreach, we told EPA our state currently has two large-scale gold mines where the reclamation bonds have been released and are now covered by postclosure bonds. One postclosure bond in the amount of $19.6 million covers a 100-year period of long term water treatment for acid drainage, while another in the amount of $42 million covers treatment of elevated sulfates and selenium for 100 years.

   Our state also holds two postclosure bonds for another gold mine that is still operating. One bond in the amount of $37.3 million covers treatment of elevated nitrates and selenium for a period of 50 years in the operating portion of the mine. The other bond in the amount of $1.7 million covers a portion of the mine area where the reclamation bond has been released. The postclosure bond covers elevated sulfates in groundwater at an isolated location and a capped acid rock depository.

   EPA's response to our postclosure questions during the July 19 conference call did not alleviate our concerns that our postclosure bonding program could be preempted. We do not agree with EPA's faulty preemption argument concluding state programs do not address hazardous releases, since our postclosure bonds clearly address releases of hazardous substances. Therefore, the Department requests EPA clarify that such bonds are not subject to preemption or clarify how the rules will affect states that have established postclosure bonding requirements. In addition, we request the rules exempt mining operations which are no longer producing, but are in a reclamation or postclosure phase, from the CERCLA 108(b) financial assurance requirements. In the alternative, the state requests the preamble to the rule clarify that any existing state bonds would not be impacted under the new rules.

3. **Cyanide Spill Bonds**: Given cyanide is considered a hazardous substance under CERCLA, the Department told EPA during the July 19 conference call it is concerned that our cyanide spill bond program described above would be duplicated and pre-empted by the new financial responsibility rules.

EPA's response to our cyanide spill bond questions during the July 19 conference call did not alleviate our concerns that our cyanide spill bonding program could be preempted. We do not agree with EPA's faulty preemption argument concluding state programs are not addressing hazardous releases, since our cyanide spill bonds clearly address releases of hazardous substances. Therefore, the Department requests EPA clarify that such bonds are not subject to preemption or clarify how the rules will affect mining operations which are required to submit cyanide spill bonds. In the alternative, the state requests the preamble to the rule clarify that any existing state bonds would not be impacted by the new rules.

4. **EPA Notification to States**: The Department requests EPA to commit to coordinating and communicating with states in the following circumstances:

    1. When a mine operator is required to post a bond with EPA;

    2. When a bond amount is determined; and

    3. When the bond has been submitted and accepted by EPA.

We also request the rules require draft copies of financial assurance calculations be submitted to states for their review and final copies be submitted for their records.

5. **Risk Reduction Practices:** The Department and Board have taken steps in the past 25 years to reduce risks at hard rock mines and mineral processing facilities. We require operators to submit extensive geochemical data so we can determine whether acid drainage or other contaminants will be generated during the mining or processing of ore and waste material. If there are impacts that cannot be mitigated by methods such as capping or water treatment, we can recommend denial of a mine permit application in accordance with state law.

The Department and Board have also improved bonding procedures. Previously, we only bonded for basic reclamation, such as earthmoving and revegetation. However, as mentioned earlier, we now include costs related to such things as required water treatment, waste depository capping, and holding costs during a five-year reclamation period in our reclamation bonds. Some of these costs would arguably cover responses to hazardous substances covered under CERCLA.

As mentioned above, the Department requires postclosure bonds to cover long term water treatment costs, which reduce the risk of a CERCLA action at a mine site. We also require cyanide spill bonds to cover costs to respond to and remediate accidental releases of cyanide into the environment. This also reduces the risk of a CERCLA action at a mine site.

The Department requests EPA include an exemption in the rules for those states that have instituted defined measures to reduce risks of the release of hazardous substances.

6. **EPA Consultation**: During the one-hour May 17, 2016 webinar, after EPA completed its presentation on the rules process, there were only about 20 minutes available for questions. During the July 7 and 19, 2016 one-hour conference calls with states and state organizations, there was not enough time for the states to adequately describe their bonding programs and how well they are working. This clearly shows that more time is needed for meaningful consultation. The Department requests EPA participate in more substantive consultation with the states prior to publishing a proposed rule. We also request EPA commit to a one day in-person meeting to discuss state bonding programs and the intended scope of the rules.